

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <p>(21) International Application Number: PCT/US97/12716</p> <p>(22) International Filing Date: 18 July 1997 (18.07.97)</p> <p>(30) Priority Data: 08/684,707 19 July 1996 (19.07.96) US</p> <p>(71) Applicant (for all designated States except US): IDENTIFICATION TECHNOLOGIES INTERNATIONAL, INC. [US/US]; Suite 703, 2655 Lejeune Road, Coral Gables, FL 33134 (US).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): HAN, Kedu [CN/CN]; Apartment H-114, 7901 S. West 104th Street, Miami, FL 33156 (US). HERTZ, David, B. [US/US]; 441 Valencia Avenue, Coral Gables, FL 33134 (US). VAN GELDER, Lex [NL/NL]; Identification Technologies International, Inc., Suite 703, 2655 Lejeune Road, Coral Gables, FL 33134 (US).</p> <p>(74) Agent: GROSSMAN, Jon, D.; Dickstein Shapiro Morin & Oshinsky LLP, 2101 L Street, N.W., Washington, DC 20037-1526 (US).</p> | | <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p> <p>(88) Date of publication of the international search report: 30 April 1998 (30.04.98)</p> |
| <p>(54) Title: SYSTEM FOR OBJECT VERIFICATION AND IDENTIFICATION</p> <div data-bbox="467 1171 1153 1612" data-label="Image"> </div> <p>(57) Abstract</p> <p>A method and apparatus (2200) for identifying, or verifying the identity of objects, such as faces. The present system identifies an object, such as a face, from unique signals and values emitted by the attributes of components on the object such as eyes, eyebrows, hairline, mouth, cheeks, ears, and chin on a face (Fig. 20). The object image is analyzed to determine the different components. In turn, these components are then transformed through one of several transformations such as, geometric, cosine, or Kohonen's, to yield a unique description for each component. The data obtained from the object is then transferred to either a portable memory (fig. 1, Numeral 70), such as a magnetic stripe card, smart card, or a one- or two-dimensional bar-code card or to a data base (Fig. 1, Numeral 72). A decision process of comparing the two results, from the object image, and from the data encoded in ID card, or data base, is subsequently performed (Fig. 2).</p> | | |

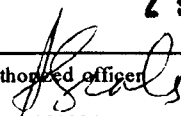
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US97/12716

| A. CLASSIFICATION OF SUBJECT MATTER IPC(6) :G06K 9/46 US CL :382/115 According to International Patent Classification (IPC) or to both national classification and IPC | | |
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| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 235/380,382,382.5; 340/825.34; 382/115,118; 902/3,4,5,25,26,27,29 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) NONE | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | US 5,432,864 A (LU et al) 11 July 1995, see col. 6, lines 54-63; col. 7, lines 32-47; col. 8, lines 1-21 and 65-68; col. 9, lines 4-6, lines 21-24 and lines 46-64; and col. 10, lines 1-3. | 1-6 |
| A | US 5,466,918 A (RAY et al), 14 November 1995, col. 2, lines 49-66. | 1, 3 |
| A | US 4,712,103 A (GOTANDA) 08 December 1987, col. 2, lines 27-49. | 1 |
| A | US 4,754,487 A (NEWMUIS) 28 June 1988, col 3, line 55 - col. 4, line 13. | 1 |
| A | US 5,410,609 A (KADO et al) 25 April 1995, col. 2, lines 8-51. | 1 |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex. | | |
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| Date of the actual completion of the international search 20 OCTOBER 1997 | | Date of mailing of the international search report 29 JAN 1998 |
| Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230 | | Authorized officer  BRIAN P. WERNER Telephone No. (703) 306-3037 |

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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| A | US 4,975,969 A (TAL) 04 December 1990, col. 3, lines 7-62. | 1 |